PETROLEUM WATCH
Fossil Fuels Office
Fuels and Transportation Division
California Energy Commission

February 14, 2012

## Summary

As of February 13, retail regular-grade gasoline prices in California had increased 14 cents since the previous *Petroleum Watch* to \$3.84 per gallon, while retail diesel prices rose by 9 cents to \$4.21 per gallon. California retail prices rose primarily due to increases in crude oil prices. Diesel price increases were restrained by weakness in the trucking industry and a mild winter leading to lower heating oil demand.

California spot wholesale gasoline prices increased 26 cents from a month ago to \$3.09 per gallon, a 9 percent gain. Wholesale diesel prices rose 4 cents to \$3.20.

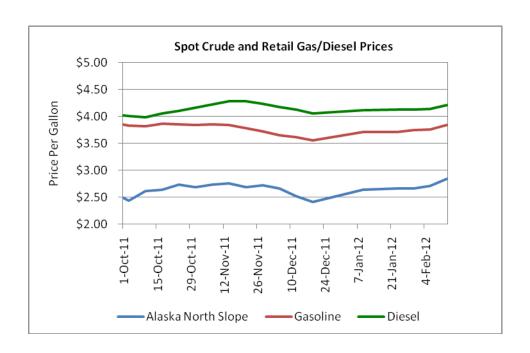
Refinery production of California-compliant gasoline in California rose 13.4 percent. Inventories of gasoline have generally increased for the past ten weeks and grew 2.6 percent in the past week. However, diesel production fell 16.2 percent while diesel inventories fell 11.9 percent in the past week, possibly due to smaller wholesale price increases compared to gasoline.

World crude oil prices contributed substantially to fuel price changes over the past month. Brent oil prices have risen to \$116.86 per barrel while West Texas Intermediate (WTI) prices have fallen to \$98.55 per barrel due to regional inventory increases. Alaska North Slope (ANS) crude oil prices rose to \$116.91 as of February 7, \$4.27 more than a month ago.

# Comparisons of Diesel, Gasoline, and Crude Oil Price Changes

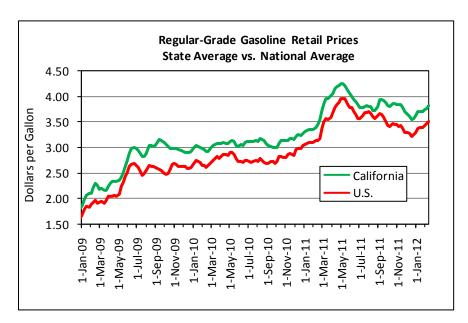
In October 2011, ANS and retail California gasoline and diesel prices increased before resuming their decline in November. In January and February, prices resumed increasing. As of February 13, ANS prices reached \$2.84 per gallon, gasoline prices were \$3.84 per gallon, and diesel prices were \$4.21 per gallon.

Gasoline prices are now equal to, and ANS and diesel prices are 41 cents and 20 cents per gallon more, respectively, than on October 3, 2011. Gasoline and diesel prices have largely tracked crude oil price changes over the last three months.

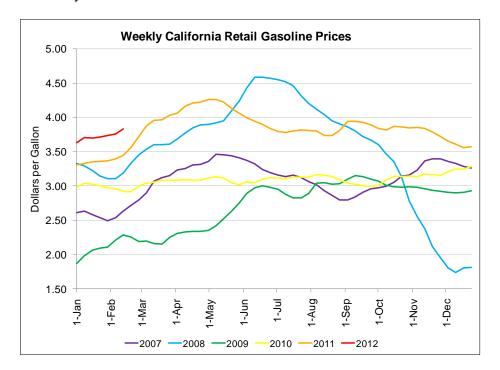


## Retail Prices

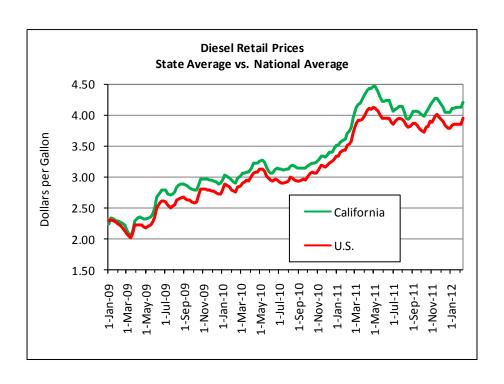
The average California **retail price for regular-grade gasoline** increased 14 cents over the past month, rising to \$3.84 per gallon, and is 39 cents higher than this time last year. Average U.S. retail gasoline prices have also increased, rising by 13 cents from a month ago to \$3.52. Average U.S. gasoline prices are 38 cents more than a year ago. The difference between California and U.S. retail gasoline prices remained close to the three-year average of 30 cents per gallon.



The past two months have seen the highest winter gasoline prices ever reached in California. So far this year prices have been consistently more than 30 cents above the previous highs of January and February 2011.



The average California **retail diesel price** increased 9 cents over the past month to \$4.21 per gallon. The average U.S. retail diesel price also rose 9 cents over the past month, to \$3.94 per gallon, so the premium for California diesel over U.S. diesel prices remained constant. California diesel prices are 46 cents higher than a year ago, and U.S. prices are 41 cents higher. Although California diesel prices did not increase as much as gasoline prices in the past month, they have been less volatile since the highs of May 2011.

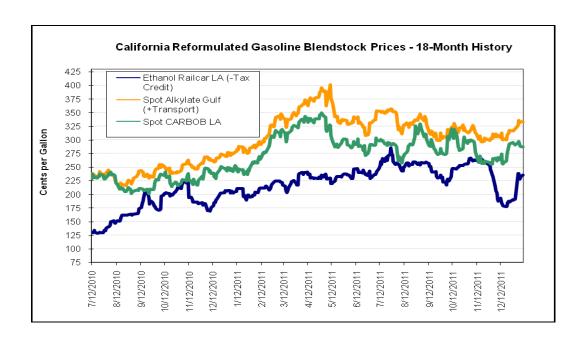


# Wholesale Gasoline and Blendstock Prices on February 9

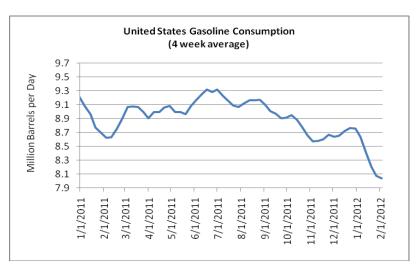
California spot wholesale gasoline prices for regular-grade reformulated blendstock for oxygenate blending (RBOB) rose to \$3.09 per gallon, 26 cents higher than a month ago and a 53 cent increase over the same time a year ago. Prices in New York saw a nearly equal trend, rising 27 cents over the past month with a 53-cent gain over a year ago. This increase is in line with the upward trend in crude oil prices.

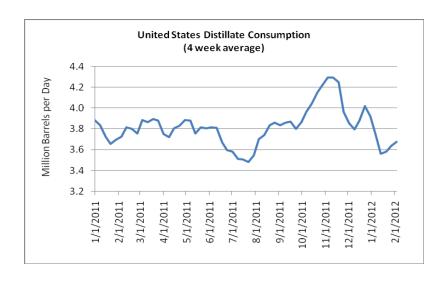
California average spot wholesale ultra-low-sulfur diesel prices stood at \$3.20, an increase of 13 cents in the past week but only up 4 cents from a month ago. This is somewhat behind the pace set by the New York Mercantile Exchange (NYMEX) which saw month-over-month gains of 7 cents.

The average representative estimated cost of **fuel ethanol** to California refiners and marketers rose 34 cents to \$2.24 per gallon as of February 3, 2012.<sup>2</sup> The recent jump in ethanol price is primarily the result of the 45 cent-per-gallon excise tax credit that expired at the end of 2011. Unless reinstated, wholesale market prices of fuel ethanol will approximate the cost to gasoline blenders.



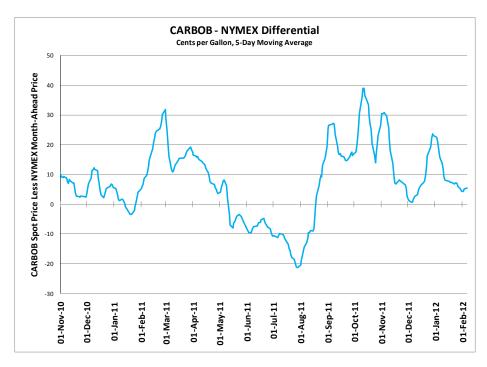
The Energy Information Administration's (EIA) weekly report for the week ending February 10 shows that U.S. gasoline consumption edged up 0.3 percent, while distillate consumption saw a 8.0 percent drop from the previous week. The four-week average consumption for gasoline is 8.0 million barrels per day, a decrease of 6.8 percent from the four-week average the same time a year ago, and the lowest levels seen since April 1997. The four-week average for U.S. distillate consumption is 3.7 million barrels per day, 1.3 percent less than the same period a year ago. Relatively high gasoline prices throughout the year are a key factor in suppressing gasoline demand. Meanwhile, the mild winter in the United States continues to depress heating oil (and hence distillate) demand.





# Futures-Spot Market Spread<sup>3</sup>

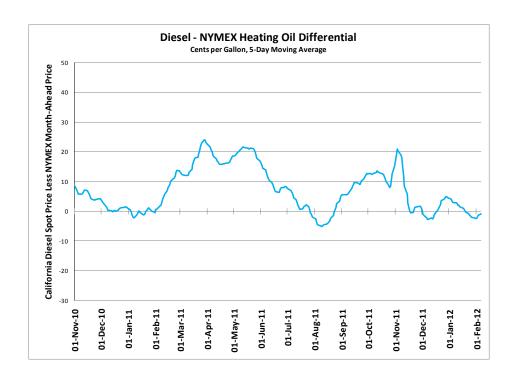
As of February 6, the spot market price for California gasoline shows a 5 cent premium to the NYMEX one-month-ahead futures price. This puts the premium below its 2010-2011 average of 9 cents but 4 cents above its year-ago level. The premium has generally moved lower over the past month as the California spot and NYMEX one-month ahead prices moved closely together. The past month has seen the lowest volatility of the spread in over a year.



California diesel sits at a discount of less than a penny to the NYMEX heating oil one-month ahead futures price, slightly below the level seen in the January *Petroleum Watch*, and well below the average 12 cent premium. Since mid-November the differential has been fluctuating slightly, staying between a 5 cent premium and a 3 cent discount. The California diesel market

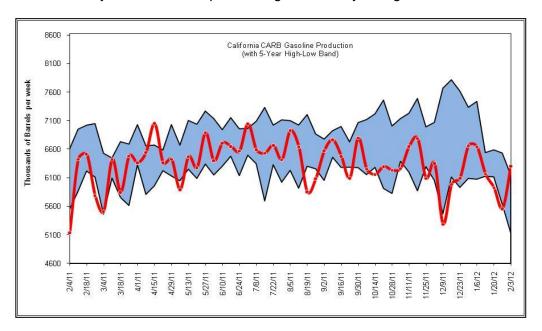
and NYMEX one-month ahead prices tracked each other very closely over the past two months, much the same as in the California gasoline market.

In spite of the fact that the heating oil market has been weak due to the warm weather and low demand for heating oil in the Northeast, the premium for California diesel has not returned. The Ceridian-UCLA Pulse of Commerce Index indicates that trucking activity has been weak throughout the United States and especially so in California, with a correspondingly low demand for diesel.

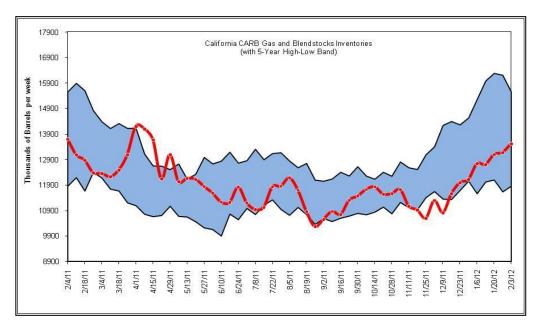


## Refinery Production and Inventories

**Reformulated gasoline production** in California for the week ending February 3 increased 13.4 percent from the previous week to 6.3 million barrels, rising above the five-year range for the first time since July 2011 and 22.7 percent higher than a year ago.<sup>4</sup>

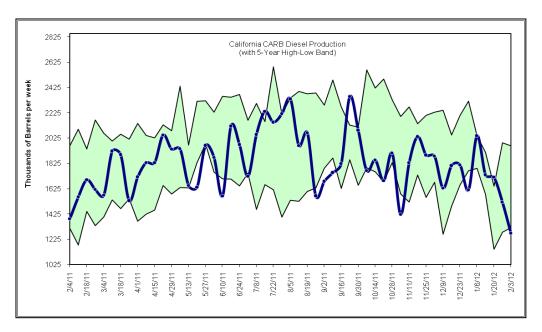


California **reformulated gasoline inventories** increased 9.3 percent from the past week, while gasoline blendstock inventories decreased 2.9 percent. California's combined inventories of reformulated gasoline and gasoline blendstocks increased 2.6 percent to 13.5 million barrels, rising to the middle of the five-year range. Combined inventories have risen by 28 percent from late November to early February in a normal seasonal build.

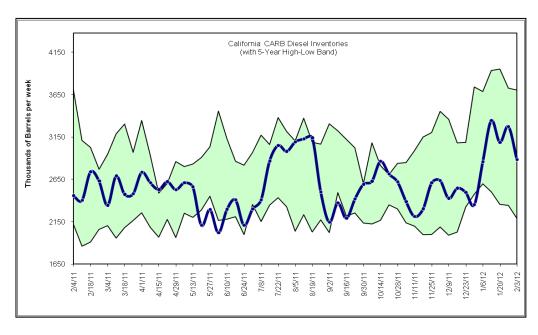


For the United States, gasoline inventories as of February 3 increased to 231.8 million barrels, 1.6 million barrels more than the previous week. Inventories increased by 7,000 barrels on the East Coast, 1.1 million barrels on the Gulf Coast, and 81,000 barrels on the West Coast.

California-compliant ultra-low-sulfur diesel fuel (CARB diesel) production<sup>5</sup> was 1.3 million barrels during the week ending on February 3, a decrease of 16.2 percent from the previous week, falling below the five-year range. From the beginning of this year to the week ending February 3, CARB diesel production has fallen 38 percent; however, non CARB diesel production has increased 54 percent, so that the decline in total diesel production was 21 percent.



**Inventories of CARB diesel** in California decreased 11.9 percent from the previous week to 2.9 million barrels, falling to the middle portion of the five-year range. From mid January to early February CARB diesel inventories have decreased by 15 percent while production has fallen by a greater degree, indicating that CARB diesel demand is currently low.



U.S. distillate inventories as of February 3 rose to 146.6 million barrels, 1.2 million barrels more than the previous week. Inventories decreased by 891,000 barrels on the East Coast, but increased by 1.9 million barrels on the Gulf Coast, and 125,000 barrels on the West Coast.

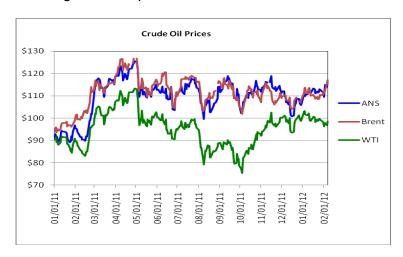
#### Crude Oil Prices and Associated Factors

West Coast prices for ANS crude oil, a refinery feedstock for California, rose to \$116.91 as of February 7. Prices have risen \$4.27 since the previous *Petroleum Watch* and are \$24.68 higher than a year ago. ANS crude oil price changes are influenced by inventory levels, refinery capacity, domestic and international economic conditions, currency exchange rates, perceived risks to global supply such as unrest in the Middle East, and near-term price trends as indicated by the futures market for crude oil. A Bureau of Labor Statistics report showed that the unemployment rate decreased from 8.5 percent in December to 8.3 percent in January, suggesting a trend of job growth. Scheduled sanctions against Iran have had the effect of increasing geopolitical tensions and reducing anticipated exports of Iranian oil to Asian and European countries, pushing prices up. Discussions of an expanded bailout to Greece have also increased economic optimism, putting upward pressure on prices. Economic indicators in the United States and Europe remain weak, however, putting downward pressure on prices.

## **Recent Trends in Crude Oil Prices**

				Directional Contributing Factor		
	January 2012	February 2012	Change from previous Month	Upward	Downward	Unchanged
ANS Crude Oil Price (U.S. Dollars/Barrel)	\$113.72	\$116.91	Up 2.8%			
Europe Brent Crude Oil Price (U.S. Dollars/Barrel)	\$113.30	\$116.86	Up 3.1%			
West Texas Intermediate, Cushing Oil Price (U.S. Dollars/Barrel)	\$102.24	\$98.55	Down 3.6%			
U.S. Crude Oil Inventories (MM Barrels)	334.6	339.2	Up 1.3%			
S&P 500	1,292	1,347	Up 4.3%			
EURO STOXX 50 Price	2,426	2,497	Up 2.9%			
Total Dollar Index	80.8	78.6	Down 1.6%			
Exchange rate: Dollars per Euro	1.28	1.32	Up 3.0 %			
European Debt Problems						
Disruption in Oil Exports						<b>✓</b>

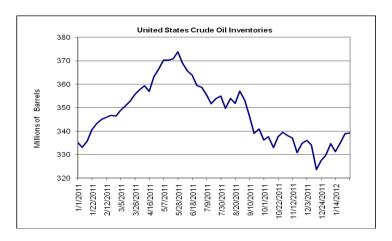
In the past month, the spread between West Texas Intermediate crude oil prices and the Brent crude oil contracts spread has widened again after having narrowed in previous months. Factors responsible for this resurging divergence include a 1.3 million barrel increase in crude oil inventories in Cushing, Oklahoma. West Texas Intermediate-NYMEX futures traded at \$98.55 per barrel as of February 7, \$18.36 less than ANS crude oil. Since mid-November, Brent and ANS have been trading at similar prices.



A major reason for the divergence between Brent and WTI crude oil prices earlier this year was the increased production of shale oil from the Bakken formation in North Dakota. A combination of increased rail transportation<sup>7</sup>, barge shipments, and planned pipeline reversals has eased transportation problems. Nevertheless, North Dakota oil production is increasing more quickly than oil transportation infrastructure in that region, which has again led to increased inventories and lower WTI prices relative to Brent.

U.S. crude oil inventories have increased over the past week. U.S. commercial crude oil inventories as of February 3 rose by 304,000 barrels from the previous week to 339.2 million barrels. Crude oil stocks are 5.8 million barrels less than a year ago but 9.8 million barrels more

than the five-year average for this date. California crude oil stocks rose 7.4 percent from the previous week to 15.3 million barrels and are 0.3 percent more than a year ago.



<sup>&</sup>lt;sup>1</sup> Retail gasoline and diesel prices and U.S. crude oil and product inventory estimates are from the Energy Information Administration of the U.S. Department of Energy.

<sup>&</sup>lt;sup>2</sup> Ethanol railcar prices are from Platts Oilgram and are average prices for prompt Southern California shipments minus a 45¢/gal federal excise tax credit for 2009 through 2011 prices and a 51¢/gal federal excise tax credit for prices prior to 2009. The federal excise tax credit expired at the end of 2011. California alkylate prices are also calculated from Platts Oilgram and include a 20¢/gal transportation and distribution cost from Gulf Coast to California. Spot wholesale prices for regular-grade California reformulated gasoline blendstock for oxygenate blending (CARBOB) are from Oil Price Information Service.

<sup>&</sup>lt;sup>3</sup> A higher spread between the state's spot fuel prices and the New York Mercantile Exchange (NYMEX) futures price indicates supplies are tighter in California, and a lower spread indicates the market is relatively well-supplied compared to the rest of the country. The NYMEX futures price reflects the national market, while California Reformulated Gasoline Blendstock for Oxygenate Blending (CARBOB) is a gasoline blend unique to California and is usually sold at a premium to the NYMEX price.

<sup>&</sup>lt;sup>4</sup> California refinery production and inventory information is from the Petroleum Industry Information Reporting Act (PIIRA) database maintained by the California Energy Commission.

<sup>&</sup>lt;sup>5</sup> Staff has discontinued the reporting of combined CARB and EPA diesel production and inventories and will report only CARB diesel as of December 2009. EPA diesel is primarily for export from California.

<sup>&</sup>lt;sup>6</sup> Alaska North Slope (ANS) crude oil prices are from *The Wall Street Journal*. Brent and West Texas Intermediate (WTI) crude oil prices are from the Energy Information Administration.

<sup>&</sup>lt;sup>7</sup> Oil Rail transportation estimates are obtained from the Energy Information Administration of the U.S. Department of Energy and the American Association of Railroads